

REMARKS

Claims 17-22, 31 and 32 currently appear in this application. The Office Action of April 10, 2008, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Election/Restriction

Applicant hereby elects Group I, claims 17-22, and has added new claims 31 and 32 which depend from elected claim 17.

Applicant reserves the right to present nonelected subject matter in divisional applications filed during the pendency of the present application.

Amendments

Claim 17 has been amended to recite that the nucleic acid is at the surface of the solid support in order to hybridize a target. This feature allows the nucleic acid molecule to immobilize the target that gravitates to an electrostatic layer. Support for this amendment can be found in the specification as filed at page 17, lines 2-6. Claim 31 is based upon the description in the specification at page 18, lines 3-14 and page 24, lines 13-19. New claim 32 is based upon the description in the specification at page 14, lines 13-14.

Art Rejections

Claims 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Mao et al., WO 03/020425.

This rejection is respectfully traversed. Claim 17 has been amended to recite that the nucleic acid molecule is located at the surface of the solid support in order to hybridize a target. This feature allows the nucleic acid molecule to immobilize the target that gravitates to an electrostatic layer. This feature is neither disclosed nor suggested in Mao.

Additionally, in new claim 31, the nucleic acid molecule is immobilized as a spot. According to this feature, a wide variety of primers can be immobilized at different regions on the solid support, whereby a large number of assays can be conducted at one time (page 18, lines 10-14 of the specification.). This feature as well as its advantageous effect is neither disclosed nor suggested in the cited references.

New claim 32 recites that the thickness of the electrostatic layer is 1 micron to 500 microns. According to this feature, a target could approach the nucleic acid molecules effectively. Finally, a target can be hybridized to the solid support effectively. This feature is neither disclosed nor suggested in the cited references.

Claim 22 is rejected under 35 U.S.C. 102(1) and 102(e) as being anticipated by Mao as further evidenced by Langer et al., *Reviews in Scientific Instruments*, 1997, **68 (15)**, pages 1510-1513.

This rejection is respectfully traversed. The feature introduced into claim 17, which is now also part of claims 22 dependent from claim 17, is that the nucleic acid is contained at the surface of the solid support whereby it can hybridize a target. This feature is neither disclosed nor suggested by Mao as evidenced by Langer.

Claims 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao in view of Woo et al., US Patent No. 5,929,194.

This rejection is respectfully traversed. AS noted above, there is nothing in Mao that discloses or suggests that the nucleic acid is contained at the surface of the solid support to

hybridize a target. Woo adds nothing to Mao, as Woo merely discloses that supports polyarylamines are known for coating substrates. There is nothing in Woo that even suggests that the polyarylamine coatings are used for electrostatic layers on supports for nucleic acid assays. There is nothing in Woo that suggest that polyarylamines can be sued in solid supports wherein a nucleic acid is covalently bonded to a chemically modifying layer on top of a polyarylamine electrostatic layer.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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